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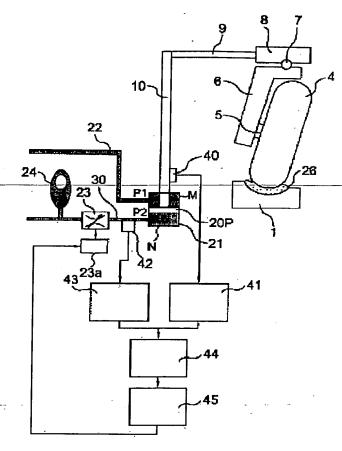
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TITLE

ROLLER TYPE GRINDING

**APPARATUS** 



ABSTRACT :

PROBLEM TO BE SOLVED: To provide a roller type grinding apparatus always holding the maximum damping effect and capable of grinding an object up to an ultrafine powder.

SOLUTION: The positional change of a roller 4 is measured by the displacement meter 40 arranged on a loading rod 10 and the frequency component of the predetermined band of the displacement of a piston 20P is taken out by a band-pass filter 41. The fluctuations of the pressure in a chamber N are measured by the pressure gauge 42 arranged to the pipeline of a cylinder device and a flow rate adjusting valve 23 and the frequency component of the predetermined band of the fluctuations of the pressure in the chamber N is taken out by a band-pass filter 43. The advance angle  $\phi$  to the displacement of the piston 20P of the pressure fluctuations is calculated by a phase difference calculator 44. A control device 45 adjusts the opening degree of the flow rate adjusting valve 23 so that the advance angle φ becomes a 1/4 cycle.

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